

Calculation of Penalty per SWRCB Water Quality Enforcement Policy

The proposed administrative civil liability was derived following the State Water Resources Control Board's Water Quality Enforcement Policy (the "Enforcement Policy") and using the "Penalty Calculation Methodology Worksheet, version date 6/24/2010" (the "Penalty Calculation Worksheet"; see attached). The proposed civil liability takes into account such factors as the Discharger's culpability, history of violations, ability to pay and continue in business, and other factors as justice may require.

Each factor of the Enforcement Policy and its corresponding score for the violation is presented below:

1. Violation No. 1 (1 July 2010 Discharge of Waste in violation of the Conditional Waiver)

Calculation of Penalty for Violation No.1

Step1. Potential for Harm for Discharge Violations

The *Potential for Harm for Discharge Violations* was calculated using the Penalty Calculation Worksheet (see attached). This steps looks at the nature, circumstances, extent and gravity of the violation.

Harm or Potential Harm to Beneficial Uses: 3

Discussion: The Discharger was given the score of 3 (moderate), which is summed with the other factors to give the final 'Potential for Harm' factor below. A moderate score was given because the discharge had moderate impact to beneficial uses, as the observed discharge is likely to attenuate over time without acute or chronic affects.

Physical, Chemical, Biological or Thermal Characteristics of the Discharge: 3

Discussion: The Discharger was given the score of 3 (above moderate), which is summed with the other factors to give the final 'Potential for Harm' factor below. An above moderate score was given as the discharge was to waters of the Sacramento/San Joaquin Delta, an area where there is a substantial concern regarding receptor protection.

Susceptibility to Cleanup or Abatement: 1

Discussion: The Discharger was given the score of 1 (< 50% of the discharge is susceptible to cleanup or abatement), which is summed with the other factors to give the final 'Potential for Harm' factor below. As the discharge has proceeded downstream less than 50% of the discharge is susceptible to cleanup.

Summing the scores given for the above factors the 'Potential for Harm' factor score is found to be 7 (Harm or Potential Harm to Beneficial Uses score of 3 + Physical, Chemical, Biological or Thermal Characteristics of the Discharge score of 3 + Susceptibility to Cleanup or Abatement score of 1).

Step 2. Assessment for Discharge Violations

Flow data is not available for this event. Therefore, the initial liability will be assessed based on a per day calculation.

Using Table 2 of the in the Enforcement Policy, the per day factor for this violation was determined to be 0.2. This factor was determined using Table 2 with the appropriate 'Deviation from Requirement' and the 'Potential for Harm' factor generated above. The Discharger violated the conditions of the Conditional Waiver, as outlined above in the "Regulatory Considerations" section of the Administrative Civil Liability Complaint. Therefore the 'Deviation from Requirement' factor is moderate because the discharge of sediment resulted in the condition not being met.

Step 3. Per Day Assessment for Non-Discharge Violations

This step is not applicable.

Initial Liability

The Discharger has obtained regulatory coverage for their waste discharges under the Conditional Waiver by enrolling in a Coalition. Discharging sediment has violated the conditions of the Conditional Waiver, which are referenced above.

Violations of the Conditional Waiver are punishable under Water Code section 13350 by civil liability in an amount which shall not exceed five thousand dollars (\$5,000) for each day in which the violation occurs.

Applying the per-day factor to the number of days of violation, calculation of the initial liability totals \$1,000 (0.2 per day factor X 1 day of violation X \$5000 per day penalty).

Step 4. Adjustment Factors

a) *Culpability: 1*

Discussion: As this violation was the Discharger's first offense staff determined that a neutral culpability score was fair. Therefore the Discharger was given the neutral score of 1, which neither increases nor decreases the fine.

b) *Cleanup and Cooperation: 1*

Discussion: The Discharger submitted a technical report outlining steps being taken to reduce excessive sediment in future discharges. A sediment basin was listed in the technical report as one of the measures that would be taken to reduce sediment being discharged from their parcel. As described in the technical report the sediment basin was constructed prior to the following irrigation season. The Discharger was given the neutral score of 1, which neither increases nor decreases the fine.

c) *History of Violations: 1*

Discussion: The Discharger was given the score of 1 which neither increases nor decreases the fine. Prior to this event, staff is unaware of any violations that occurred from the parcel.

Step 5. Determination of Total Base Liability Amount

The Total Base Liability is determined by applying the adjustment factors from Step 4 to the Initial Liability Amount determined in Step 3.

a) *Total Base Liability Amount: \$1,000* (Initial Liability (\$1,000) x Adjustments (1)(1)(1)).

2. Violation No. 2 (15 June 2011 Discharge of Waste in violation of the Conditional Waiver)

Calculation of Penalty for Violation No. 2

Step1. Potential for Harm for Discharge Violations

The *Potential for Harm for Discharge Violations* was calculated using the Penalty Calculation Worksheet (see attached). This steps looks at the nature, circumstances, extent and gravity of the violation.

Harm or Potential Harm to Beneficial Uses: 3

Discussion: The Discharger was given the score of 3 (moderate), which is summed with the other factors to give the final 'Potential for Harm' factor below. A moderate score was given because the discharge had moderate impact to beneficial uses, as the observed discharge is likely to attenuate over time without acute or chronic affects.

Physical, Chemical, Biological or Thermal Characteristics of the Discharge: 3

Discussion: The Discharger was given the score of 3 (above moderate), which is summed with the other factors to give the final 'Potential for Harm' factor below. An above moderate score was given as the discharge was to waters of the Sacramento/San Joaquin Delta, an area where there is a substantial concern regarding receptor protection.

Susceptibility to Cleanup or Abatement: 1

Discussion: The Discharger was given the score of 1 (< 50% of the discharge is susceptible to cleanup or abatement), which is summed with the other factors to give the final 'Potential for Harm' factor below. As the discharge has proceeded down stream less than 50% of the discharge is susceptible to cleanup.

Summing the scores given for the above factors the 'Potential for Harm' factor score is found to be **7** (Harm or Potential Harm to Beneficial Uses score of 3 + Physical, Chemical, Biological or Thermal Characteristics of the Discharge score of 3 + Susceptibility to Cleanup or Abatement score of 1).

Step 2. Assessment for Discharge Violations

Flow data is not available for this event. Therefore, the initial liability will be assessed based on a per day calculation.

Using Table 2 of the in the Enforcement Policy, the per day factor for this violation was determined to be 0.31. This factor was determined using Table 2 with the appropriate 'Deviation from Requirement' and the 'Potential for Harm' factor generated above. The Discharger failed to follow the plan outlined in the technical report submitted on 31 January 2011. Therefore the 'Deviation from Requirement' factor is major as the requirement has been rendered ineffective.

Step 3. Per Day Assessment for Non-Discharge Violations

This step is not applicable.

Initial Liability

The Discharger has obtained regulatory coverage for their waste discharges under the Conditional Waiver by enrolling in a Coalition. Discharging sediment has violated the conditions of the Conditional Waiver, which are referenced above.

Violations of the Conditional Waiver are punishable under Water Code section 13350 by civil liability in an amount which shall not exceed five thousand dollars (\$5,000) for each day in which the violation occurs.

Applying the per-day factor to the number of days of violation, calculation of the initial liability totals \$1,550 (0.31 per day factor X 1 day of violation X \$5000 per day penalty).

Step 4. Adjustment Factors

a) *Culpability:* 1.2

Discussion: The Discharger was given the score of 1.2, which increases the fine. This was based on the fact that the Discharger had been notified of the prior violation, and still had failed to stop the discharge of sediment-laden water. The Prosecution Team contends that the fact that the Discharger was on notice of the prior violations can lead to the conclusion that the second discharges were the result of the Discharger's negligence.

b) *Cleanup and Cooperation:* 1.2

Discussion: The Discharger submitted a technical report with a plan to monitor and reduce sediment. It appears that the sediment basin described was constructed, but the settling pond failed to reduce the suspended sediment load in the water. Additionally, the Discharger claimed that they would be monitoring discharges from their parcel for excessive sediment. It appears that they did not complete that task. The Discharger was given a score of 1.2

c) *History of Violations:* 1.1

Discussion: The Discharger was given the score of 1.1, as this was the Discharger's second offense.

Step 5. Determination of Total Base Liability Amount

The Total Base Liability is determined by applying the adjustment factors from Step 4 to the Initial Liability Amount determined in Step 3.

- b) *Total Base Liability Amount: \$2,455* (Initial Liability (\$1,550) x Adjustments (1.2)(1.2)(1.1).

COMBINED TOTAL BASE LIABILITY AND FACTORS APPLIED TO ALL VIOLATIONS

The Combined Total Base Liability Amount for the two Violations is \$3,455 (\$1,000 from Violation No. 1 and \$2,455 from Violation No. 2).

The following factors apply to the combined Total Base Liability Amounts for both of the violations discussed above.

Step 6. Ability to Pay and Continue in Business

- a) *Adjusted Base Liability Amount: \$3,455*

Discussion: As per the Enforcement Policy, “[t]he ability of a discharger to pay an ACL is determined by its revenues and assets.” Board staff contends that the Discharger has the ability to pay based on 1) the Discharger’s own the property, a significant asset, 2) the Discharger has an agricultural operation on the property, an ongoing business that generates revenues.

Based on the reasons discussed above, staff is not recommending a reduction to the Combined Total Base Liability Amount based on the Discharger’s inability to pay.

Step 7. Other Factors as Justice May Require

- a) *Base Liability Amount: \$3,455 + \$9,900 (staff costs) = \$13,355*

- b) *Discussion:* The Central Valley Water Board has incurred \$9,900 in staff costs associated with the investigation and enforcement of the violation alleged herein. This represents approximately 66 hours of staff time devoted to investigating and reporting the violations, and drafting this memo at \$150 an hour. In accordance with the Enforcement Policy, this amount is added to the Base Liability Amount.

Step 8. Economic Benefit

a) *Estimated Economic Benefit: \$150*

Discussion: Staff estimates that monitoring the settling pond for excessive sediment discharges should not take longer than 20 minutes per irrigation session (one 10 minute check half way through the irrigation session and another 10 minute check towards the end of the session).

According to the technical report submitted by the Discharger on 31 January 2011, if excessive sediments are observed in the discharge, the Discharger has the ability to hold the tailwater on the property for a longer period before releasing. The discharger also claims they can respond by reducing irrigation flows. If the discharges had been monitored, the Discharger could have been able to prevent the discharge of excessive sediments from their parcel.

Also according to the aforementioned technical report, the irrigation season typically is from April through June, approximately 91 days. If the Discharger irrigates approximately every 10 days during this period they would spend approximately 3 hours through the irrigation season checking the discharges for excessive sediment (9 irrigation sessions X .33hrs/session to check the ponds). This equals an avoided cost of \$150 (3hrs X \$50 per hr).

In calculating the 'Estimated Economic Benefit' for this ACL complaint, Staff considered calculating the cost of retrofitting the sediment basin on site as well as the use of Polyacrylamide (a synthetic water-soluble polymer used to bind soil particles and assists in pulling suspended sediments out of the water). However, Staff did not want to assume that either of these Best Management Practices ("BMPs") would be applicable to this site, as the Discharger should know which BMPs are best for their operation. In drafting the ACL Complaint, the Board should reserve the right to adjust the Estimated Economic Benefit, should evidence be produced that indicates that the Discharger should have installed these BMPs.

Step 9. Maximum and Minimum Liability Amounts

a) *Minimum Liability Amount: \$ 165*

Discussion: The Enforcement Policy requires that the minimum liability amount imposed not be below the economic benefit plus ten percent. As discussed above, the Central Valley Water Board Prosecution Team's estimate of the Discharger's economic benefit obtained from the violations cited in this memo is \$150. Therefore \$150 x 10% results in a Minimum Liability of \$165.

b) *Maximum Liability Amount: \$10,000*

Discussion: The maximum administrative liability amount is the maximum amount allowed by Water Code section 13350, which is \$5,000 for each day in which the violation occurs.

Step 10. Final Liability Amount

Based on the above analysis, and consistent with the Enforcement Policy, the final liability amount proposed for the Discharge of Waste in violation of the Conditional Waiver is \$13,355. This amount is a sum of the 'Base Liability' and 'Staff Costs' and takes into account the multipliers applied in the 'Ability to Pay and Continue Business' factor as well as 'Other Factors as Justice May Require'. Attached to this memo is a spreadsheet that demonstrates the use of the penalty calculation methodology. However, due to the maximum fine being set at \$5,000 per day, the final liability amount must be reduced and set at **\$10,000**, to reflect the 2 violation days.

For ease of reference, the Enforcement Policy adjustment factors used in this civil liability calculation are tabulated below:

Adjustment Factors			
Adjustment Factors	Range	Factors Used	
		Violation No. 1	Violation No. 2
Harm or Potential Harm to Beneficial Uses	0 to 5	3	3
Physical, Chemical, Biological or Thermal Characteristics of the Discharge	0 to 4	3	3
Susceptibility to Cleanup or Abatement	0 or 1	1	1
Final Score	0 to 10	7	7
Deviation from the Requirement	Minor, Moderate, Major	Moderate	Major
Per Day Factor	0.1 to 1	.2	.31
Culpability	0.5 to 1.5	1	1.2
Cleanup and Cooperation	0.75 to 1.5	1	1.2
History of Violations	Subjective, based on history	1	1.1

Attachment H to ACL Complaint No. R5-2011-0599

Adjustment Factors	Range	Factors Used	
		Violation No. 1	Violation No. 2
Ability to Pay	Based on financial information	1	
Other Factors as Justice May Require	None Applicable	1	
Economic Benefit	\$150		
Staff costs	\$9,900		